Filed pursuant to Rule 424(b)(3) Registration No. 333-251657

Prospectus Supplement No. 2 (to Prospectus dated February 1, 2021)

LUMINAR

LUMINAR TECHNOLOGIES, INC. Up to 181,247,830 Shares of Class A Common Stock Up to 19,999,975 Shares of Class A Common Stock Issuable Upon Exercise of Warrants

This prospectus supplement supplements the prospectus dated February 1, 2021 of Luminar Technologies, Inc., which is part of a registration statement on Form S-1 (File No. 333-251657) filed with the U.S. Securities and Exchange Commission. This prospectus supplement is provided solely to update the selling securityholders table in the prospectus to reflect transfers of warrants to purchase shares of our Class A Stock (as defined below) from GM Sponsor LLC to certain members thereof.

The prospectus and this prospectus supplement relates to the offer and sale from time to time by the selling securityholders named in the prospectus (the "Selling Securityholders") of up to (A) 181,247,830 shares of our Class A common stock, par value \$0.0001 per share ("Class A Stock"), which consists of (i) 10,000,000 shares of Class A Stock (the "Founder Shares") originally issued in a private placement to Gores Metropoulos Sponsor LLC (the "Sponsor") in connection with the initial public offering (the "IPO") of Gores Metropoulos, Inc. ("Gores"), and subsequently distributed to certain equityholders of the Sponsor, (ii) 42,064,871 shares of Class A Stock issued pursuant to the Merger Agreement (as defined in the Prospectus), (iii) 6,666,666 shares of Class A Stock issuable upon the exercise of 6,666,666 warrants (the "Private Warrants") originally issued in a private placement to the Sponsor in connection with the IPO at an exercise price of \$11.50 per share of Class A Stock and subsequently distributed to certain equityholders of the Sponsor, (iv) 105,118,203 Executive Shares (as defined in the Prospectus), (v) up to 3,944,151 Earn-Out Shares (as defined in the Prospectus) that may be issued in the form of Class A Stock pursuant to the earn-out provisions in the Merger Agreement, (vi) up 10,455,134 shares of Class A Stock that may be issued or issuable upon the conversion of any Earn-Out Shares that may be issued in the form of our Class B common stock, par value \$0.0001 per share ("Class B Stock") pursuant to the earn-out provisions in the Merger Agreement, and (vii) up to 2,998,805 shares of Class A Stock issuable upon the exercise of outstanding Rollover Options (as defined in the Prospectus) to purchase shares of Class A Stock, and (B) up to 6,666,666 Private Warrants.

In addition, the prospectus relates to the offer and sale of up to 13,333,309 shares of Class A Stock that are issuable by us upon the exercise of 13,333,309 warrants originally issued in connection with the IPO at an exercise price of \$11.50 per share of Class A Stock (the "Public Warrants" and, together with the Private Warrants, the "Warrants").

Our Class A Stock and Public Warrants are listed on the Nasdaq Global Select Market under the symbols "LAZR" and "LAZRW," respectively. On February 22, 2021, the last reported sales price of our Class A Stock was \$31.19 per share and the last reported sales price of our Public Warrants was \$19.63 per warrant.

This prospectus supplement should be read in conjunction with the prospectus, and this prospectus supplement is qualified by reference to the prospectus, except to the extent that the information provided by this prospectus supplement supersedes the information contained in the prospectus.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus dated February 1, 2021 with respect to the securities described above, including any amendments or supplements thereto.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and, as such, have elected to comply with certain reduced disclosure and regulatory requirements.

Investing in our Class A Stock is highly speculative and involves a high degree of risk. You should consider carefully the risks and uncertainties in the section entitled "Risk Factors" beginning on page 6 of the prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus supplement is February 24, 2021.

SELLING SECURITYHOLDERS

The following information is provided to update the selling securityholders table in the prospectus to reflect transfers by GM Sponsor LLC of warrants to purchase up to an aggregate of 3,333,333 shares of our Class A Stock. Accordingly, the selling securityholders table has been updated to reduce the number of shares beneficially owned by GM Sponsor LLC by 3,333,333.

The selling securityholders set forth in the table below are presented in categories intended to describe the origin of their beneficial ownership of the shares of our Class A Stock and Warrants. "Holders of Founder Shares" refers to holders of Founder Shares acquired prior to the Closing. "Holders of Executive Shares" refers to holders of Executive Shares acquired by Austin Russell, our President and Chief Executive Officer. "Holders of Private Warrants" refers to holders of Private Warrants acquired in a private placement concurrently with our IPO. "Holders of Merger Consideration Shares" refers to holders of shares of our Class A Stock received in the Business Combination. Selling securityholders whose beneficial ownership of shares of our Class A Stock or Warrants originates from the acquisition of such securities to which more than one of such categories apply are presented only in the first applicable category set forth below. Certain selling securityholders may also beneficially own shares of our Class A Stock indirectly by other selling securityholders included in the table below. In the table set forth below, such beneficial ownership is only included for the direct owner of such securities to avoid double counting, but is reflected in the footnotes for the other applicable beneficial owners of such securities.

Unless otherwise indicated below, the address of each selling securityholder listed in the table below is c/o Luminar Technologies, Inc., 2603 Discovery Drive, Suite 100, Orlando, FL 32826.

Name	Shares of Class A Stock				Warrants to Purchase Class A Stock			
	Number Beneficially Owned Prior to Offering	Number Registered for Sale Hereby	Number Beneficially Owned After Offering*	Percent Owned After Offering*	Number Beneficially Owned Prior to Offering	Number Registered	Number Beneficially Owned After Offering	Percent Owned After Offering
Holders of Founder Shares								
Randall Bort(1)	25,000	25,000		·	_	_		
Michael Cramer(2)	25,000	25,000			_	_		
Joseph Gatto(3)	25,000	25,000		·	_	_		
GM Sponsor LLC(4)(19)	8,932,500	8,932,500			_	_	_	_
HRM Holdings LLC(5)(19)	992,500	992,500			_	_	_	
Holder of Executive Shares								
Austin Russell(6)	105,118,203	115,573,337			_	_	_	
Holders of Private Warrants								
AEG Holdings, LLC(7)	3,397,324	3,397,324			1,386,325	1,386,325	_	
Edward A. Johnson(8)	133,643	128,156			128,156	128,156	_	
Mark Stone(9)	128,156	128,156			128,156	128,156	_	
Jennifer Kwon Chou(10)	3,673	1,602		_	1,602	1,602	_	
Catherine Babon(11)	44,126	19,223			19,223	19,223	_	
Andrew McBride(12)	7,347	7,347		_	3,204	3,204	_	_
Platinum Equity, LLC(13)	1,194,765	1,194,765			1,194,765	1,194,765	_	
Mary Ann Sigler(14)	45,708	32,039		_	32,039	32,039	_	
Jacob Kotzubei(15)	203,912	203,912			203,912	203,912	_	
Mark Barnhill(16)	32,039	32,039		_	32,039	32,039	_	_
Louis Samson(17	247,412	203,912			203,912	203,912	_	
HRM Holdings LLC(18)(19)	3,333,333	3,333,333		_	3,333,333	3,333,333	_	
Holders of Merger Consideration Shares								
G2VP I, LLC (for itself and as nominee fo G2VP Founders Fund I, LLC)(20)	r 15,947,553	17,524,436	_		—	—	_	_
GVA Auto, LLC(21)	18,030,728	19,824,077			_	_	—	
J.P. Morgan Trust Company of Delaware (Trustee of the C. Dean Metropoulos 2015 Delaware Trust)(22)	100,378	100,378	_		_	_	_	_
J.P. Morgan Trust Company of Delaware (Trustee of the 2016 Evan D. Metropoulos Trust)(23)	100,378	100,378	_		_	_	_	_
J.P. Morgan Trust Company of Delaware (Trustee of the 2016 J. Daren Metropoulos Trust)(24)	100,378	100,378	_		_	_	_	_
Affiliates of Luminar (Holders of Merger Consideration Shares and/or Rollover Options)								
Alec E. Gores(4) (7) (19)	10,943,499	10,943,499			_	_	_	_
Matthew J. Simoncini(25)	340,773	340,773			_	_	_	_
Scott A. McGregor(26)	917,688	1,008,962	_	_	_	—	—	_
Benjamin J. Kortlang(20)	15,947,553	17,524,436	_		_	_	_	_
Thomas J. Fennimore(27)	1,840,176	1,840,176	_	_	_	—	—	_
M. Scott Faris(28)	1,635,712	1,717,056	_		_	_	_	_
Jason Eichenholz(29)	4,034,770	4,436,071		_	_	_	_	

* We do not know when or in what amounts the selling securityholders will offer shares for sale, if at all. The selling securityholders may sell any or all of the shares included in and offered by this prospectus. Because the selling securityholders may offer all or some of the shares pursuant to this offering, we cannot estimate the number of shares that will be held by the selling securityholders after completion of the offering. However, for purposes of this table, we have assumed that after completion of the offering all of the securities registered will be sold by the selling securityholders.

- (1) Randall Bort is a former member of our Board who holds Founder Shares. The address for Mr. Bort is 9800 Wilshire Boulevard, Beverly Hills, CA 90212.
- (2) Michael Cramer is a former member of our Board who holds Founder Shares. The address for Mr. Cramer is 9800 Wilshire Boulevard, Beverly Hills, CA 90212.
- (3) Joseph Gatto is a former member of our Board who holds Founder Shares. Mr. Gatto is an affiliate of a broker-dealer. Mr. Gatto acquired the shares being registered hereunder in the ordinary course of business, and at the same time of the acquisition of the shares described herein, he did not have any arrangements or understandings with any person to distribute such securities. The address for Mr. Gatto is 9800 Wilshire Boulevard, Beverly Hills, CA 90212.
- (4) Represents 8,932,500 Founders Shares held by GM Sponsor LLC ("GM"). AEG Holdings, LLC ("AEG") is the managing member of GM and Alec E. Gores is the managing member of AEG. Voting and disposition decisions with respect to securities held by GM are made by Mr. Gores. Mr. Gores is a member of our Board. The address for GM is 9800 Wilshire Boulevard, Beverly Hills, CA 90212 and the address for AEG is 6260 Lookout Road, Boulder, CO 80301.
- (5) Represents 992,500 Founders Shares held by HRM Holdings LLC. C. Dean Metropoulos is the managing member of HRM Holdings LLC ("HRM") and various trusts for the benefit of Mr. Metropoulos and members of his immediate family are the members of HRM. Voting and disposition decisions with respect to securities held by HRM are made by Mr. Metropoulos. Mr. Metropoulos is a former member of our Board. The address for HRM and Mr. Metropoulos is 200 Greenwich Avenue, Greenwich, CT 06830.
- (6) Includes (i) solely with respect to the "Number Registered for Sale Hereby" column, 10,455,134 shares of Class A Stock issuable upon the conversion of the Class B Stock issuable as Earn-Out Shares and (ii) 105,118,204 shares of Class B Stock which are convertible into Class A Stock on a one-to-one basis as more fully described in the section titled "Description of Securities" in this prospectus. Mr. Russell is our President, Chief Executive Officer and Chairman of the Board.
- (7) Represents (i) 2,010,999 Merger Consideration Shares held by AEG Holdings, LLC and (ii) 1,386,325 shares of Class A Stock issuable upon exercise of Private Warrants held by AEG Holdings, LLC. Excludes shares held indirectly through the selling securityholder's beneficial ownership of Founder Shares held directly by GM described in footnote 4 above. Alec E. Gores is the managing member of AEG Holdings, LLC. Voting and disposition decisions with respect to such securities are made by Mr. Alec Gores. Mr. Gores disclaims beneficial ownership of these securities except to the extent of any pecuniary interest therein. Mr. Alec Gores is a member of our Board. The address for AEG Holdings, LLC is 6260 Lookout Road, Boulder, CO 80301.
- (8) Represents (i) 5,487 Merger Consideration Shares and (ii) 128,156 shares of Class A Stock issuable upon exercise of Private Warrants held by Edward E. Johnson. The address for Mr. Johnson is 6260 Lookout Road, Boulder, CO 80301.
- (9) Represents 128,156 shares of Class A Stock issuable upon exercise of Private Warrants held by Mark Stone. The address for Mr. Stone is 6260 Lookout Road, Boulder, CO 80301.
- (10) Represents (i) 2,071 Merger Consideration Shares and (ii) 1,602 shares of Class A Stock issuable upon exercise of Private Warrants held by Jennifer Kwon Chou. The address for Ms. Chou is 9800 Wilshire Boulevard, Beverly Hills, CA 90212.
- (11) Represents (i) 24,903 Merger Consideration Shares and (ii) 19,223 shares of Class A Stock issuable upon exercise of Private Warrants held by Catherine Babon. The address for Ms. Babon is 6260 Lookout Road, Boulder, CO 80301.
- (12) Represents (i) 4,143 Merger Consideration Shares and (ii) 3,204 shares of Class A Stock issuable upon exercise of Private Warrants held by Andrew McBride, our former Chief Financial Officer. The address for Mr. McBride is 6260 Lookout Road, Boulder, CO 80301.
- (13) Represents 1,194,765 shares of Class A Stock issuable upon exercise of Private Warrants held by Platinum Equity, LLC ("Platinum"). Voting and disposition decisions with respect to such securities are made by Mr.

Thomas Gores, the manager of Platinum. Mr. Thomas Gores disclaims beneficial ownership of these securities except to the extent of any pecuniary interest therein. The address for Platinum is 360 No. Crescent Drive, Beverly Hills, CA 90210.

- (14) Represents (i) 13,669 Merger Consideration Shares and (ii) 32,039 shares of Class A Stock issuable upon exercise of Private Warrants held by Mary Ann Sigler. The address for Ms. Sigler is 360 No. Crescent Drive, Beverly Hills, CA 9021.
- (15) Represents 203,912 shares of Class A Stock issuable upon exercise of Private Warrants held by Jacob Kotzubei. The address for Mr. Kotzubei is 360 No. Crescent Drive, Beverly Hills, CA 9021.
- (16) Represents 32,039 shares of Class A Stock issuable upon exercise of Private Warrants held by Mark Barnhill. The address for Mr. Barnhill is 9800 Wilshire Boulevard, Beverly Hills, CA 90212.
- (17) Represents (i) 43,500 Merger Consideration Shares and (ii) 203,912 shares of Class A Stock issuable upon exercise of Private Warrants held by Louis Samson. The address for Mr. Samson is 1 Greenwich Office Park, N. Building, Floor 2, Greenwich, CT 06831.
- (18) Represents 3,333,333 shares of Class A Stock issued upon the exercise of Private Warrants held by HRM Holdings LLC. Dean Metropoulos is the managing member of HRM Holdings LLC. Voting and disposition decisions with respect to such securities are made by Mr. Metropoulos. Mr. Metropoulos disclaims beneficial ownership of these securities except to the extent of any pecuniary interest therein. The address for HRM Holdings, LLC is 200 Greenwich Avenue, Greenwich, CT, 06830.
- (19) Because of the relationship among AEG, GM, HRM and Sponsor, Mr. Alec E. Gores and Mr. Metropoulos may be deemed to beneficially own these securities to the extent of their respective pecuniary interests. Mr. Gores and Mr. Metropoulos disclaim beneficial ownership of these securities except to the extent of their respective pecuniary interest therein, if any.
- (20) Represents (i) 15,947,553 shares of Class A Stock held by G2VP I, LLC for itself and as nominee for G2VP Founders Fund I, LLC ("G2VP") and (ii) solely with respect to the "Number Registered for Sale Hereby" column, 1,576,883 shares of Class A Stock issuable as Earn-Out Shares. Benjamin J. Kortlang, a member of our Board, Brook Porter, Daniel Oros and David Mount are the Managing Members of G2VP I Associates, LLC, the Managing Member of G2VP, and therefore, may be deemed to hold voting and dispositive power over the shares held by G2VP. The address of G2VP is 3280 Alpine Road, Portola Valley, CA 94028.
- (21) Represents (i) 18,030,728 shares of Class A Stock held by GVA Auto, LLC and (ii) solely with respect to the "Number Registered for Sale Hereby" column, 1,793,349 shares of Class A Stock issuable as Earn-Out Shares. Pavel Cherkashin is the Managing Partner of GVA Capital, which is the Manager of GVA Auto, LLC, and therefore, may be deemed to hold voting and dispositive power over the shares held by GVA Auto, LLC. The address of GVA Auto, LLC is 908 Broadway, San Francisco, CA 94133.
- (22) J.P. Morgan Trust Company of Delaware is the trustee of the C. Dean Metropoulos 2015 Delaware Trust (the "2015 CDM Trust") and is therefore deemed to hold voting and dispositive powers over the securities held by the 2015 CDM Trust. The address for 2015 CDM Trust is 500 Stanton Christiana Road, Newark, DE 19713.
- (23) J.P. Morgan Trust Company of Delaware is the trustee of the 2016 Evan D. Metropoulos Trust (the "2016 EDM Trust") and is therefore deemed to hold voting and dispositive powers over the securities held by the 2016 EDM Trust. The address for 2016 EDM Trust is 500 Stanton Christiana Road, Newark, DE 19713.
- (24) J.P. Morgan Trust Company of Delaware is the trustee of the 2016 J. Daren Metropoulos Trust (the "2016 JDM Trust") and is therefore deemed to hold voting and dispositive powers over the securities held by the 2016 JDM Trust. The address for 2016 JDM Trust is 500 Stanton Christiana Road, Newark, DE 19713.
- (25) Represents 340,773 shares of Class A Stock issuable upon exercise of outstanding Rollover Options.
- (26) Represents (i) 917,688 shares of Class A Stock and (ii) solely with respect to the "Number Registered for Sale Hereby" column, 91,274 shares of Class A Stock issuable as Earn-Out Shares.

- (27) Represents 1,840,176 shares of Class A Stock issuable upon exercise of outstanding Rollover Options.
- (28) Represents (i) 817,856 shares of Class A Stock, (ii) 817,856 shares of Class A Stock issuable upon exercise of outstanding Rollover Options, and (iii) solely with respect to the "Number Registered for Sale Hereby" column, 81,344 shares of Class A Stock issuable as Earn-Out Shares.
- (29) Represents (i) 4,034,770 shares of Class A Stock and (ii) solely with respect to the "Number Registered for Sale Hereby" column, 401,301 shares of Class A Stock issuable as Earn-Out Shares.